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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/989,160	11/21/2001	Katsuyoshi Kubo	A8165	9769

7590 03/18/2005

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Washington, DC 20037-3213

EXAMINER
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WOODWARD, ANA LUCRECIA

ART UNIT	PAPER NUMBER
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1711

DATE MAILED: 03/18/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/989,160

Applicant(s)

KUBO ET AL.

Examiner

Ana L. Woodward

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE Three MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on February 25, 2005
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-8 and 12 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-8 and 12 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### *Claim Rejections - 35 USC § 102/103*

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-4, 7 and 8 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over U.S.C 5,057,575 (Chapman, Jr. et al).

Chapman, Jr. et al disclose a polymer blend composition comprising

(a) a major amount of a difficultly melt-processable polymer, reading on the presently claimed engineering plastic, and

(b) a minor amount, effective to improve processability. of

(1) a fluorocarbon copolymer, embracing the presently claimed perfluoropolymer, and

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(2) a tetrafluoroethylene polymer, also reading on the presently claimed perfluoropolymer.

Suitable fluorocarbon polymers (1) include perfluoropolymers, such as, copolymers of tetrafluoroethylene and perfluoro(alkyl vinyl ether) and copolymers of tetrafluoroethylene and hexafluoropropylene (column 4, lines 60-65). Suitable tetrafluoroethylene polymers (2) include perfluoropolymers, such as, homopolymers of tetrafluoroethylene and copolymers of tetrafluoroethylene and perfluoroolefins or perfluoro(propyl vinyl ether)s (column 5, lines 10-38). Examples of difficulty melt-processable polymers include polyamides. In fact, when polyamides are used, tetrafluoroethylene/hexafluoropropylene copolymer may simultaneously serve as fluoropolymer (1) and fluoropolymer (2) (column 5, lines 41-46).

The examples provide various formulations comprising hydrocarbon polymer, reading on the presently claimed engineering plastic, fluoropolymer type 1, not precluded from the present claims, and fluoropolymer type 2A-2E, reading on the presently claimed perfluoropolymer (tables 2-7). The examples of the reference meet the requirements of the above-rejected claims, both in terms of the types of materials added and their contents.

It is not seen that the presently claimed "consists essentially of" terminology precludes the fluoropolymer (1) of the examples. This is because applicants state that similar fluoropolymers can also be included in the present composition (page 7 specification). It is, therefore, not apparent that the presence of the fluoropolymer (1) would materially affect the basic and novel characteristics of the presently claimed composition. The onus is shifted to applicants to establish that the product of the present claims is not the same as or obvious from that set forth by the reference.

In any event, attention is directed to the reference's comparative example 2, devoid of the fluoropolymer (1), which clearly meets the requirements of the above-rejected claims.

4. Claims 1-4, 7 and 8 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over U.S. 6,380,313 (Dillon et al).

Dillon et al disclose a resin composition comprising a melt processable polymer, reading on the presently claimed engineering plastic, and a fluoropolymer, embracing the presently claimed fluoropolymer. The composition, preferably, comprises about 0.01 and 0.2 weight percent of the fluoropolymer (column 5, lines 10-16). Suitable fluoropolymers include perfluoropolymers derived from a perfluoro vinyl ether, tetrafluoroethylene and a monomer of the formula  $\text{RCF}=\text{CR}_2$ , wherein R can be F or a perfluoroalkyl group (see claim 5). It is maintained that said fluoropolymers would meet applicants' perfluoropolymer. Suitable thermoplastic polymers include polyamides and polyketones (column 8, lines 19-20).

In examples 6 and C6, patentees use a blend of fluoropolymers comprising 10 weight percent tetrafluoroethylene/perfluoromethyl vinyl ether copolymer, reading on the presently claimed fluoropolymer, and 90 weight percent of another fluoropolymer, not precluded from the present claims. The examples of the reference meet the requirements of the above-rejected claims, both in terms of the types of materials added and their contents.

It is not seen that the presently claimed "consists essentially of" terminology precludes the additional fluoropolymer of said examples. This is because applicants state that similar fluoropolymers can also be included in the present composition (page 7 specification). It is, therefore, not apparent that the presence of the additional fluoropolymer would materially affect the basic and novel characteristics of the presently claimed composition. The onus is shifted to

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applicants to establish that the product of the present claims is not the same as or obvious from that set forth by the reference.

***Claim Rejections - 35 USC § 103***

5. Claims 5, 6 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. 5,057,575 (Chapman, Jr. et al) and U.S. 6,380,313 (Dillon et al), both described hereinabove.

In essence, the disclosures of the references differ from the above-rejected claims in not expressly exemplifying the use of polyamides or polyetheretherketones as the melt processable polymer blended with the perfluoropolymer. The references, however, teach that other resins, besides the exemplified hydrocarbon resins, can be used satisfactorily, for example, polyamides and polyketones. Accordingly, it would have been obvious to one having ordinary skill in the art to have used a polyamide or a polyetheretherketone (an obvious species of the generic polyketones disclosed by Dillon et al) as the polymer that is blended with the perfluoropolymer with the reasonable expectation of success. Absent evidence of unusual or unexpected results no patentability can be seen in the presently claimed subject matter.

It should be noted that even if applicants establish that the terminology “consists essentially of” precludes the additional fluoropolymers of the reference, that it is still within the purview of the reference to employ a perfluoropolymer or mixtures thereof as the fluoropolymer component. In this regard, attention is directed to the fact that both types of fluoropolymers taught by Chapman, Jr. et al can be perfluoropolymers. Indeed, said disclosure clearly teaches that when polyamides are used, tetrafluoroethylene/hexafluoropropylene copolymer may simultaneously serve as fluoropolymer (1) and fluoropolymer (2) (column 5, lines 41-46). As to

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Dillon et al, it is within the scope of said invention to use a perfluoropolymer per claim 5 as defined when R can be F or a perfluoroalkyl group.

### ***Double Patenting***

6. Claims 1-8 and 12 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-16 of copending Application No. 10/380,830. Although the conflicting claims are not identical, they are not patentably distinct from each other because they contain overlapping subject matter.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

7. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

### ***Response to Arguments***

8. Applicant's arguments filed January 26, 2005 have been fully considered but they are not persuasive to overcome the rejection over Dillon et al.

It is maintained that examples 6 and C6 of Dillon et al meet the requirements of the above-rejected claims, both in terms of the types of materials added and their contents. It is not seen that the presently claimed "consists essentially of" terminology precludes the additional

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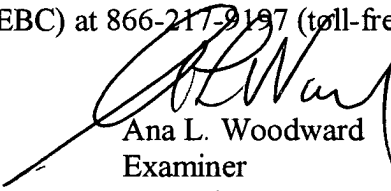
fluoropolymer of said examples. This is because applicants state that similar fluoropolymers can also be included in the present composition (page 7 specification). It is, therefore, not apparent that the presence of the additional fluoropolymer would materially affect the basic and novel characteristics of the presently claimed composition. The onus is shifted to applicants to establish that the product of the present claims is not the same as or obvious from that set forth by the reference.

### *Conclusion*

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ana L. Woodward whose telephone number is (571) 272-1082. The examiner can normally be reached on Monday-Friday (8:30-5:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James J. Seidleck can be reached on (571) 272-1078. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Ana L. Woodward  
Examiner  
Art Unit 1711

AW